

## Office of the Commissioner of Railroads

## Direct Testimony of City of Madison

Petition of the Wisconsin Department of Transportation for the Establishment of a Public Crossing of the Wisconsin & Southern Railroad, LLC Tracks with Wagon Trail Pathway in the City of Madison, Dane County

Docket 9170-RX-316

March 17, 2016

1 **Q. Please state your name, business address, and occupation.**

2 A. My name is Anthony Fernandez, P.E.

3 Engineer IV

4 City of Madison

5 210 Martin Luther King Jr. Blvd. Rm. 115

6 Madison, WI 53704

7 **Q. Please identify your education, professional qualifications, and work experience.**

8 A. I received a B.S.C.E degree from Illinois Institute of Technology in Chicago, Illinois in 1982 and

9 became a registered Professional Engineer in the state of Illinois in 1986. I am currently a

10 Professional Engineer registered in the State of Wisconsin. I have been a project engineer for the

11 design of transportation projects for the City of Madison, Engineering Division for approximately

12 fifteen years and prior to that was a transportation engineer in the consulting industry for

13 approximately 20 years. I am currently responsible for design and oversight of various

14 transportation projects for the City, with a particular emphasis on non-motorized transportation.

15

16 **Q. What is the purpose of your testimony in this proceeding?**

1 A. The purpose of my testimony is to: provide some background information; outline the  
2 proposed design of the crossing; explain the importance of the crossing to the overall  
3 phasing of the project; discuss safety issues; and finally, cost apportionment.

4  
5 **Q. Are you sponsoring any Exhibits?**

6 A. Yes.

7  
8 **Q. Please describe your exhibits.**

9 A. Ex.-City-Fernandez-1 is the Capital City Trail Project Map from December 2013 which shows  
10 the location of the planned and existing path segments between Buckeye Road and the Interstate.

11 Ex.-City-Fernandez-2 is the Project Location Map, which shows the general location of the  
12 proposed path and crossing in relation to the major roads.

13 Ex.-City-Fernandez-3 shows the path location with respect to the crash wall.

14 Ex.-City-Fernandez-4 is a project overview map, which shows path segments 4-6 in greater detail.

15 Ex.-City-Fernandez-5 is a plan of the actual crossing shown in more detail.

16  
17 **Q. Can you provide a background for the petition?**

18 A. Wisconsin Department of Transportation (WisDOT) petitioned the OCR for a new, at-grade  
19 public crossing of the former Union Pacific tracks, operated by Wisconsin & Southern Railroad  
20 (WSOR) at Wagon Trail on October 12, 2015. The public crossing would be for pedestrians,  
21 bicycles, other non-motorized users and authorized emergency vehicles only. In addition the  
22 crossing would serve as a maintenance access for WisDOT to their World Dairy Wetland  
23 Mitigation (WDWM) site and for City of Madison staff to access to utility easement on the  
24 mitigation site.

1  
2 This is part of an overall project consisting of a paved multi-use (bicycle / pedestrian) path that  
3 will extend the Capital City Trail approximately 1.6 miles from Buckeye Road to east of  
4 Interstate 39 on the southeast side of Madison, generally following the Wisconsin & Southern  
5 Railroad (WSOR) corridor.

6  
7 In 2014 Madison was awarded federal Transportation Alternatives Program (TAP) funds,  
8 administered by WisDOT, to construct Segment 4-6 of the path from Vondron Road to east of I-  
9 90/39, a length of approximately 4000 feet. Ex.-City-Fernandez-1 is the Capital City Trail  
10 Project Map from December 2013 shows the location of the planned and existing segments  
11 between Buckeye Road and the Interstate. WisDOT is the petitioner for the crossing at Wagon  
12 Trail because the project will be built with DOT-administered funds. City of Madison is fully in  
13 support of the petition.

14  
15 This crossing is in the same location as a proposed street crossing, approved by the OCR in 1991  
16 under docket 9040-RX-952, which was intended to serve a proposed residential subdivision south  
17 of the tracks. Neither the street nor the crossing were ever constructed. The original order was not  
18 rescinded, but a new hearing and Decision are appropriate due to the passage of time and the  
19 changed use proposed for the crossing. The City has an existing 66-foot wide easement for City  
20 of Madison utilities crossing the rail corridor in this location.

21  
22 Until 2014 the WDWM site was in agricultural use. It appears to have been accessed from a well-  
23 defined gravel drive extending south from the end of Wagon Trail across the tracks. Some of this  
24 access was likely unauthorized use by neighbors or others to dispose of yard waste.

25  
26 **Q. Can you describe the proposed Crossing Location and Design?**

1 A. Ex.-City-Fernandez-2 is a Project Location Map which shows the general location of the  
2 proposed path and crossing in relation to the major roads. Note that the proposed crossing  
3 location at Wagon Trail is approximately ½ mile (2570') from the nearest track crossing at  
4 Vondron Road, and more than ¾ mile (4070') from the nearest at-grade crossing to the east at  
5 Underdahl Road. East of the proposed rail crossing the path would make use of the existing  
6 railroad bridge to cross under the Interstate. There would be no access to the path or crossing of  
7 the railroad at this location. The path itself would be located behind the crash wall as shown on  
8 Ex.-City-Fernandez-3 and therefore would not encroach on the existing operational width of the  
9 rail underpass. Ex.-City-Fernandez-4 is a Project Overview Map shows Segment 4-6 in greater  
10 detail.

11  
12 The actual crossing is shown in more detail on Ex.-City-Fernandez-5. Plan – Proposed RR  
13 Crossing for Capital City Path at Wagon Trail. The connecting path at the crossing would consist  
14 of a 10-foot wide asphalt path on 14-foot wide crushed aggregate base. The connecting path  
15 extends approximately 125 feet from the end of Wagon Trail to the Capital City Path, with a  
16 modest down-grade from the street end to the path, The crossing is oriented perpendicular to the  
17 tracks.

18  
19 The crossing improvement would include closing off the currently-unfinished end of Wagon Trail  
20 with standard concrete barrier curb and sidewalk. The curb and conventional concrete ramp for  
21 the shared-use connector will better define the crossing as being for non-motorized use only and  
22 signage will prohibit unauthorized motor vehicles.

23  
24 The rail crossing itself would be approximately 75 feet south of the street end. We recommend a  
25 crossing surface consisting of pre-cast concrete panels, at least 14 feet long, to provide a

1 minimum of 2 feet of surface beyond the edges of the path. The asphalt connector would visually  
2 be identical to a typical shared-use path with center striping, but the pavement thickness would be  
3 increased to accommodate the occasional maintenance vehicle.

4  
5 Drainage on the north side of the tracks is generally east to west. There is no clear swale, and  
6 though a culvert is shown on City records, our surveyors were unable to locate it. The proposed  
7 improvement will accommodate the drainage with a new culvert under the connecting path. South  
8 of the tracks the drainage is generally toward the wetlands to the southwest. A new culvert pipe  
9 will carry the flow from the east across the new path and the gravel access road.

10  
11 **Q. Can you describe the Project Phasing and Importance of the Crossing**

12 A. The overall project is a non-motorized transportation facility of local, regional and State-wide  
13 importance. This 1.6 mile segment not only serves existing and planned residential areas in the  
14 City but is also is a key piece of the remaining 6-mile gap in what would become a continuous  
15 140-mile long path across the State. The Cities of Madison and Fitchburg, Dane County and the  
16 WDNR signed a Memorandum of Agreement in 1996 to cooperate to close this gap from the  
17 Capital City Path to the Glacial Drumlin State Trail in the village of Cottage Grove. Under that  
18 Memorandum, Madison committed to complete the path to the Interstate.

19  
20 WDNR took responsibility for the remainder from the Interstate to the Village of Cottage Grove,  
21 and has completed property acquisition from the Interstate to the Village. Dane County Parks has  
22 now assumed the lead in completing that path segment, and will be using federal funds to  
23 complete the environmental document and design.

24  
25 The City's current TAP project is for Segment 4-6 from Vondron Rd to the Interstate, and  
26 Madison will be completing the environmental documentation for that Segment. FHWA and

1 WisDOT have agreed to accept these limits for the environmental document, provided Madison  
2 agrees to not construct beyond Wagon Trail until such time as Dane County has completed the  
3 path continuing east of the Interstate.

4  
5 Dane County has encountered unexpected delays in obtaining the federal funding for the  
6 environmental and design work, and therefore the City will likely construct the 2750-foot long  
7 Segment 4 from Vondron Road to Wagon Trail as the initial contract. This represents a  
8 significant piece of the length for which Madison is responsible, and includes a bridge and the  
9 critical crossing of the railroad to access to the adjacent neighborhood. Without the railroad  
10 crossing at Wagon Trail, this phase lacks a logical east terminus and could not be built. At such  
11 time as Dane County completes the continuation east of the Interstate, the crossing at Wagon  
12 Trail would remain an important access point for adjacent neighborhoods, but would not be the  
13 absolute necessity that it is at present.

14  
15 However, a second use for the crossing would be vehicular access for WisDOT, Madison  
16 Metropolitan Sanitary District, City of Madison and American Transmission Company to  
17 maintain the 200 acre World Dairy Wetland Mitigation (WDWM) site to the south and the  
18 utilities' facilities in easements on that site. The WDWM site has a very limited number of access  
19 points, the closest of which is 3000 feet south of the Wagon Trail access. Because of the wetland  
20 terrain and waterways, it is nearly impossible to access the northern portions of the WDWM site  
21 from the south. Therefore, we strongly believe that a permanent crossing at this location is  
22 advisable under all the circumstances.

23  
24 **Q. Can you speak to the Safety associated with the proposed crossing?**

25 A. The terrain is relatively flat and the track alignment is straight for a considerable distance to the  
26 east and at least 350 feet west of the crossing. The horizontal and vertical geometry allows almost

1 unlimited clearing to sight distance to the east. Except for vegetation within the rail right of way,  
2 clearing sight distance to the west is at least 800 feet, even with the curve. As shown on the  
3 photos in Exhibit [ 6 ] vegetation within the rail corridor causes some obstruction. The City  
4 would be glad to participate in a field diagnostic meeting to evaluate the adequacy of the  
5 available clearing sight distance and determine the clearing that would be required to meet safety  
6 standards. We believe that adequate clearing sight distance is, or can be made available.

7  
8 Bikes or pedestrians approaching the crossing from the street or from the main path to the south  
9 will be on the perpendicular connecting path for 50 feet in advance of the crossing, adequate to  
10 see crossing controls and observe trains approaching from either direction. Users from the north  
11 will be approaching perpendicular to the tracks for more than 180 feet, from the nearest  
12 intersection. This is illustrated on the detail exhibit and the photos. We note that this exact  
13 location was previously approved by the OCR for a public vehicular crossing with passive  
14 controls.

15  
16 It is difficult to estimate the number of bicycle and pedestrian users of this crossing. Madison has  
17 estimated that, when the entire path is completed to Cottage Grove there could be more than 1000  
18 users on the main path on some days. Likely fewer than 25% of these would use this connector.  
19 However, it should be noted that this location is already being used frequently by pedestrians to  
20 cross the tracks, presumably neighborhood residents wanting to walk in the extensive open space  
21 to the south. Given the terrain and other conditions it would be practically impossible to  
22 physically prevent this type of use, and therefore the proposed marked and protected crossing  
23 would increase public safety in this regard also.

24  
25 We emphasize that this would not be a public vehicular crossing. Curbing, signage and other  
26 appropriate measures would be in place to assure that only authorized vehicles use the crossing.

1 There would be no hard surface south of the shared-use path and therefore no reasonable  
2 destination for unauthorized motor vehicles. The City's proposed use of the crossing for  
3 maintenance would be primarily for cleaning of sanitary sewer, once every two years. It is also  
4 important as access for emergency repairs, as a line break would interrupt sanitary service to a  
5 large number of households. Likely the other maintenance access would be very infrequent, but I  
6 do not personally have information about that.

7  
8 Given the low speed and volume of trains, the favorable geometry, moderate volume of low-  
9 speed, not-motorized users and very low volume of vehicular crossings the City recommends  
10 recommend only passive controls for the crossing.

11  
12 **Q. Can you describe how the proposed crossing would be funded?**

13 A. Our assumption is that the Project would bear 100% of the initial construction costs for the  
14 crossing surface and any required controls to insure adequate safety. Some of these costs will  
15 likely be covered by federal funds under the TAP grant. Madison is in full support of the petition  
16 and will assume responsibility for the local share and all other project costs not covered by the  
17 TAP funds.

18  
19 **Q. Does this conclude your testimony?**

20 A. Yes, it does.